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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/576,706	01/08/2007	Saskia Lehmann	OST-061103	2066

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EXAMINER	
SELLERS, ROBERT E	
ART UNIT	PAPER NUMBER
1796	
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12/18/2009	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No.	Applicant(s)	
	10/576,706	LEHMANN ET AL.	
	Examiner	Art Unit	
	ROBERT SELLERS	1796	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *04 September 2009 and 07 December 2009*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1 and 3-17* is/are pending in the application.

4a) Of the above claim(s) *12-16* is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1, 3-11 and 17* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date _____
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

1. Claims 12-16 are withdrawn from further consideration pursuant to 37 CFR 1.142(b) as being drawn to a nonelected inventions, there being no allowable generic or linking claim. The election was made **without** traverse in the reply filed September 4, 2009.

2. The response filed December 7, 2009 indicates the election of the species of 1,6-hexanediacrylate UV-curing monomer, Nanocryl XP/7093 functional groups-containing resin (a silicon dioxide-reinforced melamine acrylate resin according to page 6, lines 6-9 of the specification), Darocur 1173 photoinitiator (2-hydroxyl-2-methyl-1-phenyl-1-propanone according to page 8, lines 16-17), the presence of Florstab UV-2 as the stabilizer of claim 9, and the presence of Ebecryl 7100 as the co-iniitator of claim 10 (page 8, last line to page 9, line 2).

The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. A nonstatutory obviousness-type double patenting rejection is appropriate where the conflicting claims are not identical, but at least one examined application claim is not patentably distinct from the reference claim(s) because the examined application claim is either anticipated by, or would have been obvious over, the reference claim(s). See, e.g., *In re Berg*, 140 F.3d 1428, 46 USPQ2d 1226 (Fed. Cir. 1998); *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) or 1.321(d) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent either is shown to be commonly owned with this application, or claims an invention made as a result of activities undertaken within the scope of a joint research agreement.

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

Claims 1, 3-11 and 17 are provisionally rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claims 1, 8, 9, 12, 13, 15-17 and 24 of copending application no. 11/649,728. Although the conflicting claims are not identical, they are not patentably distinct from each other.

3. The claims of the copending application denote a glass printing ink or lacquer including a bisphenol A-based epoxy resin having a weight average molecular weight of from 700 to 1500 (claim 8), a photoinitiator, a UV-curing monomer and an amino, hydroxyl, epoxy, acid, acid anhydride and/or acrylate-functional resin.

This is a provisional obviousness-type double patenting rejection because the conflicting claims have not in fact been patented.

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.
>
> (e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

Claims 1, 3-6 and 17 are rejected under 35 U.S.C. 102(b) as being anticipated by Komiyama et al. Patent No. 5,118,567.

4. Komiyama et al. (col. 2, lines 7-11) discloses an adhesive layer for a tape prepared from 100 parts by weight of a (meth)acrylate polymer within the claimed other functional resin having acrylate and acid groups (col. 8, Example 2, lines 38-42) preferably from 100 to 1000 parts by weight per 100 parts by weight of the (meth)acrylate polymer (col. 4, lines 19-21) of an epoxy resin such as Epikote 1001 bisphenol A epoxy resin with a number average molecular weight of 900 (col. 8, Example 2, lines 43-48), a photopolymerizable low molecular weight compound such as an epoxy acrylate (col. 4, line 33, within the ambit of both the claimed UV-curable monomer and other functional resin of claim 3) and from 0.1 to 10 parts by weight per 100 parts by weight of the photopolymerizable low molecular weight compound of a photopolymerization initiator (col. 5, lines 11-16).

5. The claimed glass printing ink or lacquer is merely the ultimate intended utility of the claimed blend contained in the preamble and is not a critical limitation thereto since the blend is a self-contained description of the structure not depending on the preamble for completeness.

Claims 1, 3-8 and 17 are rejected under 35 U.S.C. 102(b) as being anticipated by Noguchi et al. Patent No. 5,476,752.

6. Noguchi et al. (col. 22, Example 4) shows a composition applied to glass (col. 22, lines 42-43) comprising 23.2% wt.% of amino-functional linear methacrylate polymer LP-1 (col. 18, lines 38-40), 5.9% wt.% of Epikote 1001 bisphenol A epoxy resin (col. 9, lines 13-15) having a molecular weight of from 900-1000 (calculated from an epoxy equivalent of from 450-500 g/eq x 2 eq/mole from footnote *1), trimethylolpropane triacrylate, 2.3% wt.% of triphenylsulfonium tetrafluoroborate polymerization initiator, 0.2% wt.% of crystal violet dye and an alicyclic epoxy resin within the UV hardening reactive diluent of claim 8. The use of 1,6-hexanediol di(meth)acrylate is disclosed in column 6, lines 64-65).

7. The claimed glass printing ink or lacquer is merely the ultimate intended utility of the claimed blend contained in the preamble and is not a critical limitation thereto since the blend is a self-contained description of the structure not depending on the preamble for completeness.

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

Claims 10 and 11 are rejected under 35 U.S.C. 103(a) as being unpatentable over Noguchi et al.

8. Noguchi et al. is described hereinabove. The use of a photopolymerization accelerator within the co-initiator of claim 10 is set forth in column 15, lines 63-67.

9. It would have been obvious to incorporate the disclosed photopolymerization accelerator of Noguchi et al. in order to reduce the curing time.

10. Although the claimed minimum amount of 0.5 wt.% of dye is not exemplified, it would have been obvious to raise the level of crystal violet dye exhibited in Example 4 of Noguchi et al. to within the claimed parameters in order to optimize the coloration.

Claim 17 is rejected under 35 U.S.C. 102(e) as being anticipated by Xu Publication No. 2007/0149667, European Patent No. 1,086,403 and Oka et al. Patent No. 6,485,885.

11. Xu (page 7, Table 1, Example 1) shows a mixture of 42.1 wt.% of Epon 825 bisphenol A diglycidyl ether (page 7, Table 1, Glossary) possessing a molecular weight of from 350-360, 8.0 wt.% of Epiclon N-740 phenol epoxy novolac within the claimed epoxy-functional other resin, SR-399 monohydroxy dipentaerythritol pentaacrylate or the elected species of 1,6-hexanediol di(meth)acrylate (page 4, paragraph 47), 1.5 wt.% of Irgacure 184 photoinitiator, CPI-6976 co-iniitator and PVP polyvinylpyrrolidone stabilizer.

12. The European patent (page 4, paragraph 24) is directed to a stereolithographic or coating composition (page 14, paragraph 96, lines 13-15) containing a cationically curable compound such as especially preferably diglycidyl ethers of bisphenol A (page 5, paragraph 28, lines 2-3) including Araldite GT solid bisphenol A epoxy resins (embracing the Araldite GT 7072 described on page 4, line 24 of the instant specification), from 0.1 to 12% by weight of free radical and cationic photoinitiators (page 8, paragraph 57), a free-radical curable component such as Ebecryl 3700 bisphenol A diglycidyl ether diacrylate (page 15, paragraph 103, lines 5-6, within the both the claimed UV-curable monomer, an epoxy-based cationic reactive modifier (page 12, paragraph 82, within the claimed epoxy-functional other resin) and pigments or dyes (page 13, paragraph 89).

13. Oka et al. is directed to a formulation derived from (A) 100 parts by weight (col. 22, lines 18-22) of a carboxyl group-containing oligomer or polymer, (B) from 0.015 to 60 parts by weight of an O-acyloxime photoinitiator (col. 1, lines 4-5), (C) from 5 to 300 parts by weight of a photopolymerizable reactive diluent such as poly(meth)acrylates (col. 4, lines 25-26 and col. 15, lines 1-17), (D) from 10 to 150 parts by weight of a polyepoxy compound (col. 4, lines 27-28) such as a bisphenol A epoxy resin (col. 15, line 66 to col. 16, line 3), (E) a co-initiator (col. 16, lines 59-67), stabilizers (col. 18, line 37 to col. 20, line 33) and coloring agents (col. 20, lines 48-51).

14. The claimed glass printing ink or lacquer is merely the ultimate intended utility of the claimed blend contained in the preamble and is not a critical limitation thereto since the blend is a self-contained description of the structure not depending on the preamble for completeness.

15.

Claims 1 and 3-11 are rejected under 35 U.S.C. 103(a) as being unpatentable over Xu, European Patent No. 1,086,403 and Oka et al. Patent No. 6,485,885 in view of Knell Patent No. 5,346,933 and Kamen et al. Patent No. 5,656,336.

16. Xu is discussed hereinabove and is open to the utilization of bisphenol A epoxy resins in general (page 1, paragraph 15, line 3). The elected species of Darocure 1173 photoinitiator is shown in Table 1 (page 7) and Table 2 (page 8, Example 7). The European patent and Oka et al. are also addressed hereinabove and discloses, but does not exemplify, the claimed bisphenol A epoxy resin with a weight average molecular weight of from 800 to 1500.

17. Knell teaches an ink for glass ciol. 8, lines 12-14) produced from bisphenol A epoxy resins such as Epon 1001F (col. 6, Examples 1 and 2) having a molecular weight of 1075 according to the Polysciences, Inc. data sheet. Kamen et al. establishes the an ink for glass comprising a solid bisphenol A epoxy resin with a molecular weight of from 800-1200 (col. 4, lines 6-8) curable with a cationic photoinitiator (col. 5, lines 8-10).

18. It would have been obvious to employ the solid bisphenol A epoxy resins possessing molecular weights within the claimed range disclosed in Knell and Kamen et al. as the bisphenol A epoxy resins of Xu, the European patent and Oka et al. in order to enhance the adhesion to glass.

The prior art made of record and not relied upon is considered pertinent to disclosure.

19. Steinmann et al. Patent No. 5,476,748 applied in the lack of unity rationale in the restriction and election of species requirement mailed June 1, 2009 is no longer relied upon since the limitation of cancelled claim 2 requiring the bisphenol A based epoxy resin to have a weight average molecular weight of from 800 to 1500 has been inserted into independent claim 1, thereby precluding the liquid epoxy resin of the reference.

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/Robert Sellers/
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12/16/2009